What is claimed is:

1. A fuel cell comprising a bipolar plate, an anode and a cathode, and an electrolyte (e.g., PEM) situated in between, reactants being passed through inlet and outlet ports over the anode and cathode, and a heat transport medium (e.g., water) being passed through the bipolar plate via separate inlet and outlet ports (7, 8),
wherein the bipolar plate is subdivided into at least two reaction areas (1, 2), each reaction area having inlet ports (3a, 3b, 5a, 5b) and outlet ports (4a, 4b, 6a, 6b) for the reactants.

2. The fuel cell as recited in Claim 1,
wherein each reaction area (1, 2) has inlet and outlet ports for the heat transport medium, and means are provided with which the heat transport medium may flow separately over the different reaction areas (1, 2).

3. The fuel cell as recited in Claim 1 or 2,
wherein means are provided for varying the flow rate of the heat transport medium.

4. The fuel cell as recited in Claims 1, 2 or 3,
wherein means are provided for measuring the temperature of the individual reaction areas (1, 2).

5. The fuel cell as recited in Claim 4,
wherein means are provided which influence the flow of reactants and/or the heat transport medium as a function of the measured temperature values.

6. A method of activating a fuel cell having the features as recited in one of Claims 1 through 5, wherein a first reaction area (1) is heated first to the reaction temperature by the heat transport medium, and reactants flow only over this first reaction area, and additional reaction areas (2) are supplied with reactants successively only after they have been heated to the reaction temperature.

7. The method as recited in Claim 6,

wherein the reactants flow in succession over a plurality of reaction areas (1, 2) which are at the reaction temperature.

8. The method as recited in Claim 6 or 7,
wherein the reactants flow over a plurality of reaction areas (1, 2) in parallel.